Spectrex SharpEye[™] 40/40 Duct Mount





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1 Description

This document describes the installation instructions for the Duct Mount P/N 877670.

The Duct Mount is suitable for use with the SharpEye 40/40C and 40/40D models.

The Duct Mount allows flame detection in areas where high temperatures exist or in cases where the detector cannot be installed inside the area. It consists of a special duct mount arrangement with a specific optical window to allow installation in high temperature duct applications.

The Duct Mount will limit the cone of vision of the installed detector to 70 $^\circ$ horizontal and 70 $^\circ$ vertical.

Ensure that the temperature of the Duct Mount installation is between : -67 and 392 $^{\circ}$ F (-55 and 200 $^{\circ}$ C).

2 Install the Duct Mount

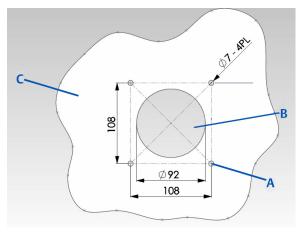
Procedure

- 1. Prepare the surface.
 - a) Check the air duct installation surface stability. Install the Duct Mount as close as possible to a riding girder connection in order to ensure proper support to the Duct Mount and the Flame Detector.

Also, ensure that the surface is stable and free of vibrations.

- b) Locate the best installation surface for the detector, so that the detector will have a full cone of vision to the protected area.
- c) Drill the duct hole and the screw holes carefully.

Figure 2-1: Drilling Layout Dimensions for Duct Installation



- A. Screw holes
- B. Duct hole
- C. Duct installation surface
- 2. Disassemble the Duct Mount.
 - a) Unscrew the nuts and washers.

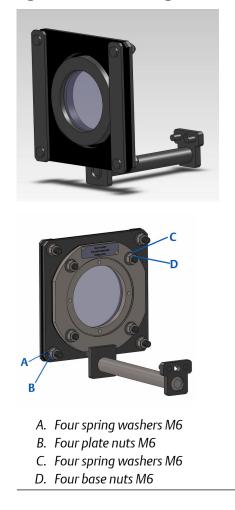
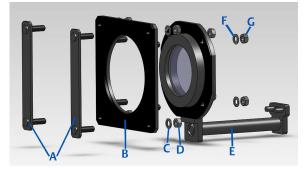


Figure 2-2: Disassembling the Duct Mount

b) Detach the internal plate and base plate.

Figure 2-3: Duct Mount Parts

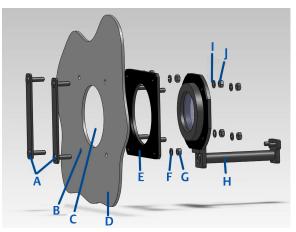


- A. Two internal plates
- B. Base plate
- C. Four spring washers M6
- D. Four plate nuts M6
- E. Duct mount base
- F. Four spring washers M6
- G. Four base nuts
- 3. Mount the Duct Mount.
 - a) Insert the first internal plate through the air duct hole.
 - b) Hold the first internal plate by hand and press the base plate to the installation surface against the internal plate.

At the base plate, there is a gasket, which is glued.

- c) Insert the internal plate screws into the gasket holes to prevent the internal plate from falling.
- d) Secure the base plate to the installation surface using four nuts and washers.
- e) Remove your hand and repeat for the second internal plate.
- f) Attach the duct mount base to the base plate and secure it with washers and nuts.

Figure 2-4: Duct Mount Parts Before Final Assembly



- A. Two internal plates
- B. Screw holes
- C. Air duct hole
- D. Duct installation surface
- E. Base plate
- F. Four spring washers M6
- G. Four plate nuts M6
- H. Duct mount base
- I. Four spring washers M6
- J. Four base nuts M6

The base plate and duct mount base are now connected.

Figure 2-5: Duct Mount Parts After Assembly



4. Mount the detector. Insert the detector at the pin and secure it using a screw.

Note

The screw is already mounted on the detector. Remove it and reinstall it facing the other direction.

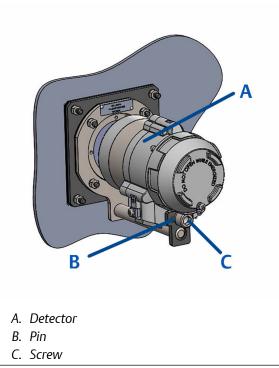
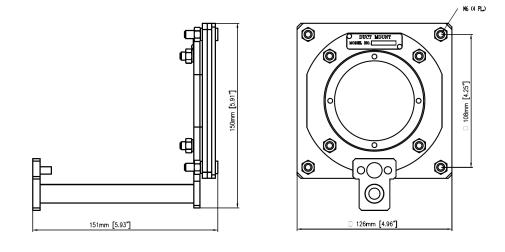


Figure 2-6: Detector Mounted on Duct Mount

3 Technical support

For all technical assistance or support contact: Emerson Automation Solutions 6021 Innovation Boulevard Shakopee, MN 55379-9795 USA T +1 866 347 3427 F +952 949 7001 safety.csc@Emerson.com





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